Art. XXXIII.—*Report of the Committee appointed by the Board of Public Education to Inquire into the Sanitary Condition of the Schools of the First School District of Pennsylvania, City of Philadelphia.* Pamphlet, pp. 37, with 7 plates. Philadelphia, 1875.

This very modest little pamphlet presents facts of startling significance, and suggests reflections of the gravest import. The inquiry was made at the suggestion of the Social Science Association of Philadelphia. The Board deserves credit for the honesty and fearlessness with which it has ascertained and stated truths all-important of recognition, but by no means agreeable of confession.

Two series of questions were prepared by the Committee. One, addressed to teachers, elicited replies from over four hundred schools of all grades. The other, addressed to such physicians as could give time and the requisite ability to the investigation, received from a dozen physicians, answers as to forty-four schools. Both sets of returns are here tabulated on half a dozen large folded sheets. A very few pages of the briefest and most practical comment upon the tables compose the general Report of the Committee. This exhibits an intelligent appreciation of existing evils, and an earnest desire to procure their removal.

Desiring to obtain data as to atmospheric impurities which should be thoroughly trustworthy, Dr. Nebinger, of the Committee, employed a practical chemist to examine the air of a dozen specimen school-rooms of different grades. The report of this gentleman, Mr. E. Thomson of the Boys' High School, forms the text for some sensible remarks by Dr. Nebinger, upon the effects of so high a degree of impurity; and upon the manner in which existing flues, in many school buildings, might be made to discharge, at least in part, the functions for which they were designed but which they have failed to perform.

Remarks and suggestions not capable of tabular expression, are printed, as made by two of the medical reporters.

A general summary of the reports of chemist and physicians, tabular and other, prepared at the request of the Committee, attempts to exhibit at a glance such of the results obtained as could, perhaps, be best interpreted and commented on by a medical man.

Now we wish to direct attention to one fact, that while other evils are more or less frequent, or important, or distinctly recognizable, the one great evil of POISONED AIR is everywhere and by all recognized and deplored as a cause of suffering and disease. Thus out of two hundred and fifteen primary schools, only four or five (including some indistinct answers) neglect to state that *open windows are necessary and habitual.* And though about one teacher in ten, in these schools, claims to be able to "maintain a tolerably pure atmosphere, warm enough, by any means,"—this testimony, dubious as it is, is often contradicted by the thermometric report, which shows a stratum of cold air near the floor. Of sixty grammar schools, all but one mention the necessity of open windows.

Reflect for a moment on the frightful enforced exposure to the causes of croup, pneumonia, and other diseases, which is here shown to be the sole and chosen refuge from blood-poisoning. A man in his office, can open a window and avoid the draft, or put his feet to the fire. These poor children must sit in chairs screwed to the floor, and take furnace blight and wintry blast just as they come!

Nor are the direct drafts of cold air alone, liable to cause chills and consequent inflammation. For instance, 263 girls, in a school with air "extremely foul," "no ventilation," "windows open," and the mercury outside at 20° F., were studying at a temperature of 52° near the floor and only 58° seven feet above. And again, in like circumstances, we find 364 girls, with open windows, temperature outside at 20°, and within, 58° and 64°. Two schools presented the cheerful temperatures of 40°, near floor, and 50°–52° above. These cases are not selected as the very worst, but such as happened to meet the eye.

The chemical reports are not much more cheerful reading. They show uniformly increased, but very different, percentages of carbonic acid. This, of course, is considered important, more as a measure of other and more baneful organic matters than for its own qualities. The highest percentage noted by the practical chemist, was .21 of one per cent. A much higher amount was reported by another observer.

We must admit then that our schools are unventilated. Open windows are necessary all or nearly all of the time. Yet many of them have "flues," and "registers," and various appliances intended by the builders to remove foul air. A sad proof of the utter lack of practical knowledge concerning a subject of supreme importance to the health and life of a great people!

Another evil connected with our schools which would seem very great, if not overshadowed by the giant vice just described, is the faulty arrangement of windows and desks with reference to the eyes. Visual hygiene has been wholly ignored in the location and construction of these. Pupils are often obliged to study with a glare of light in front of them, from books either too near the eyes or too remote. There is no doubt that much of the increasing prevalence of visual weakness and defect may be due to this cause. Indeed, eye troubles would seem to be often directly traceable to school life.

Badly formed desks and seats are also, doubtless, chargeable with much needless fatigue and exhaustion, besides preventing proper expansion of lungs and producing distortions and curvatures.

Privies so offensive as to contaminate the air of adjacent school-rooms, are in several cases reported.

Undrained cellars, full of dampness, and even stagnant water, are not unfrequently reported. This condition of things is fraught with danger to the health of pupils in the lower rooms.

Inquiry as to the use of light gymnastic exercises frequently elicits the reply that desks and pupils are too numerous and crowded to admit of these. We believe the employment of a few moments in each hour in gentle physical exercise is an important agency in preserving the health of school children. The natural restlessness of childhood, which cannot safely be wholly repressed, may thus get proper vent, while great or protracted determination of blood to the brain is avoided.

We cannot but wish that sanitary inspection of our schools could be made general, constant, and systematic. Not information only, but reformation of abuses might then be expected. A physician who should also be an accomplished chemist, and acquainted with sanitary science, properly paid for devoting his whole time to the work, and clothed with proper authority, could immensely benefit the rising generation in our schools. Some such suggestion is, if we remember rightly, made in the recent report of the Board of Health of Philadelphia, and is worthy of serious attention. If kept wholly free from the contamination of politics, carefully and wisely made, and earnestly supported, such an appointment should be productive of incalculable good.

Whatever course the educational authorities may see fit to pursue, we earnestly trust that they will realize the momentous responsibilities resting upon them. The report of their committee is before them. The sad facts which it reveals cannot be ignored. Let the medical profession in Philadelphia, and let all intelligent men and women, resolve so to inform and arouse public opinion that sanitary reform in the schools shall be demanded in tones admitting of no denial and no delay.

We had designed adverting to several papers upon school hygiene in various reports which are before us. Space forbids, however, anything more than the statement that, all over this land, thoughtful men are awakening to the evils and perils of existing schools. Health reports of Michigan, California, Massachusetts, and the cities of New York and Boston, have recently presented important essays on the subject. B. L. R.

ART. XXXIV.—*Health-Board Reports.*

1. *Report of the Board of Health of the City and Port of Philadelphia for* 1874. 8vo. pp. 402.
2. *Second Annual Report of the Secretary of the State Board of Health of Michigan. Fiscal year ending Sept.* 30, 1874. 8vo. pp. xxxiii., 221. Lansing, 1875.

1. LIKE most issues of this kind, this report exhibits an annual growth somewhat appalling to the reviewer. It exceeds its predecessor, noticed in this Journal for October, 1874, by one hundred and fifty pages.

It will be impossible for us to advert to every point of interest in this very full and satisfactory report. We can only glance at one here and there, and recommend to every physician, and every intelligent friend of social science, a careful examination of the entire work.

As to the statistical results here presented, the most gratifying is the low rate of mortality. This, for 1874, is 19.66 for every thousand persons living. It is the lowest rate for fourteen years; the average having been 22.68. The distribution of deaths among the months and seasons has been less unequal than usual. The proportion of children under five years, too, has been smaller. These facts are justly attributed to the absence of extremes of cold and heat during this year. Especially are they due to an unusually temperate summer. Thus, cholera infantum exhibits a mortality only about two-thirds that of 1873, and one-half that of 1872. Zymotic diseases generally were less fatal than usual. Scarlatina, though slightly in excess of 1873, is yet beneath its average, as a cause of death. The mortality from diphtheria, though larger than for five years past, is yet very much less than the previous average.

The proportion of marriages to one thousand persons living, fell off from 10.52, in 1873, to 8.56. This is attributed to financial troubles.

The exhaustive and multiform tables present many curious and suggestive facts. We must forbear reference to these at this time; especially as many of them were noted in our review of the report for 1873.

The coloured charts exhibiting the rise and fall of mortality, marriages, etc. under various conditions, are beautifully executed, and apparently more numerous than ever before. For the ingenuity and skill with which he has devised these graphic pictures of the relations between different phenomena,